



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/669,858	09/24/2003	Kurt A. Schroder	NT11002US	4398	
7590 12/21/2004			EXAM	EXAMINER	
Gerald E. Lester			HOANG, TU BA		
22107 Fielder D	r.				
Katy, TX 77450		-	ART UNIT	PAPER NUMBER	
			3742		
			DATE MAILED: 12/21/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/669,858	SCHRODER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Tu Ba Hoang	3742				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	ocorrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be y within the statutory minimum of thirty (30) o will apply and will expire SIX (6) MONTHS fro s. cause the application to become ABANDO	timely filed  days will be considered timely.  om the mailing date of this communication.  NED (35 U.S.C. § 133).				
Status						
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1-26 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) 2-6,10-17 and 19-26 is/are allowed. 6) ☐ Claim(s) 1,7-9 and 18 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 24 September 2003 is/ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Examine 11.	are: a) $\boxtimes$ accepted or b) $\square$ obj drawing(s) be held in abeyance. Stion is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applic rity documents have been rece u (PCT Rule 17.2(a)).	ation No sived in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 12/23/03	4) Interview Summ Paper No(s)/Mail 5) Notice of Informa 6) Other:					

Art Unit: 3742

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7-9, and 18 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Boulos et al (US 2003/0143153). Boulos et al shows a nanopowder synthesis system and method thereof for substantially increasing production rates of nanopowder (or increased yields) in which at least one member of precursor material is immersed in a gaseous atmosphere 16 of one of a reaction gas, a quenching gas, and a combination thereof (i.e., titanium tetrachloride, page 3, paragraph [0059]), a high magnetic filed (i.e., solenoid coil or magnet 18) is applied to the precursor material in an area of plasma interaction with the at least one member for generating high magnetic field and plasma, wherein the plasma that interacts with the member and the gaseous atmosphere is formed to produce the nanopowder (page 4, paragraph [0061]).

Claims 2-6, 10-17, and 19-26 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or fairly suggest the use of a pair of ablative electrodes of precursor material aligned in opposing relation from one to another, whereby a high magnetic field is applied to the electrodes in near proximity to area of plasma interaction with the pair of electrodes (i.e., surrounding opposing tips of the pair of electrodes).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Schroder et al (US 6,777,639), Yadav et al (US 6,719,821 and US 6,214,195), Milani et al (US 6,392,188), and Hendrickson et al (US 5,962,082).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (571) 272-4780. The examiner can normally be reached on Mon-fri from 8:30AM to 6:00PM.

Application/Control Number: 10/669,858 Page 3

Art Unit: 3742

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tu Ba Hoang Primary Examiner Art Unit 3742

December 10, 2004